

REMARKS

In the final office action, the examiner rejects all pending, non-withdrawn claims except claim 52 as being obvious in view of Zahradnik combined with Behrens. The applicants respectfully believe that the examiner's interpretation of the scope of claims 21 and 22 is unreasonably broad.

To begin, the applicants remind the examiner of the multi-layered restriction requirements handed down by the examiner in the office action mailed July 12, 2005. In section 4 of that communication, the applicants were required to elect one of four stated species. Two of those four species were:

- A. Coating the diffuser before use with a chemical additive;
- C. Injecting a chemical additive into the water in the region where the bubbles are emitted from the diffuser.

The applicants elected species "A." We would not have been allowed to elect both "A" and "C" and present a separate independent claim drawn to each. Species are defined to be mutually exclusive inventions. The applicants submit that it is obvious that any reader, skilled or unskilled in the art, upon reading Zahradnik and the descriptions above of species "A" and "C," would associate "C" with Zahradnik. Yet now the examiner argues that the elected claim, limited to species "A", reads on Zahradnik plus Behrens. This might be possible if Zahradnik described two ways of using the additive. Instead he describes a single way, which the examiner now must argue is an example of both species "A" and species "C." This can be true only if "A" was an embodiment of "C" and never a separate species in the first place. This inconsistent treatment within the same examination can be resolved only by admitting that if Zahradnik describes "C" above, it cannot reasonably also be said to describe "A." Clearly what Zahradnik describes is much more recognizable as species "C."

Since claim 21 is the independent claim that has resulted from the applicants' election of species "A," it follows that what Zahradnik describes combined with what Behrens describes cannot be an example of the method of claim 21 (or of claim 22).

It is well settled that claim construction is a matter for the person of ordinary skill in the art. Turning to claim 22, the applicants submit that no such person will understand the passage "the chemical additive is coated onto the diffuser and allowed to set before use in water . . ." as reading on the experiment Zahradnik describes where additive is dissolved in a tank of water at various concentrations. Bubbles are emitted into the tank through two orifices in stainless steel capillary tubes. There is no teaching or suggestion in Zahradnik that the stainless steel tubes could then be removed from his experimental tank and transported to a marine survey site such as Behrens describes and then be used to generate small bubbles due to supposed coating of the stainless steel tubes in the Zahradnik tank. There is no teaching anywhere that coating, especially of stainless steel, could take place under the Zahradnik circumstances, much less that any wording in Zahradnik can be cited as exemplifying the claim limitation "allowed to set." Instead, the examiner's explanation that Zahradnik's additive is allowed to set because "it is introduced and given time to interact with its environment to influence the bubbles" merely reads claim 22 as though the words "allowed to set" were not present. Persons skilled in the art would not agree that the words "allowed to set before use in water" are so devoid of meaning that the setting can be deemed to occur while the diffuser is being used and immersed in water. This is not a reasonable interpretation of "allowed to set." Consider also that this interpretation requires one to believe that while immersed in water, and with bubbles actively bubbling out of the diffuser orifices, the additive is supposed to be coating the orifices, and setting. This is not a reasonable interpretation of the words of the claim. As the examiner will know, claim construction rules do not allow ignoring an obvious meaning of words in a claim and assuming instead that the words are surplus verbiage to be ignored.

The examiner's overly broad interpretation of the scope of claim 22 is also entirely inconsistent with support in the specification for that claim, in particular paragraph 38:

[0038] In step 16, the surface of the preconditioned hose is coated with a selected chemical additive such as one of the additives disclosed herein, for example ExxonMobil Exxal-13 diluted 50% in ethanol. Exxal-13 has an isomeric composition as follows: Major isomers are tetramethyl-1-nonanol, trimethyl-1-decanol, and trimethyl-1-nonanol, Carbon number distribution: 7% C11, 30% C12, 60% C13, 3% C14. Preferably, two coats are applied. The quantity of active Exxal-13 to apply for this first coating is at least 0.04 g/inch of hose. Application to small quantities of hose is preferably by paintbrush. Surface should be shiny but not dripping, and it should be allowed to set for at least 5 minutes before use. Application to larger quantities of hose can be via dunking in a tray or vat of Exxal-13, or by spraying Exxal-13, in each case with Exxal-13 diluted in a suitable solvent.

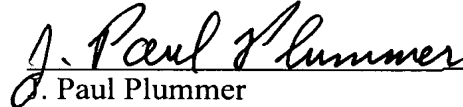
Before the examiner can argue that the applicants seek to import limitations into the claims from the specification, the applicants hasten to add that paragraph 38 is cited as supporting existing claim limitations such as “allowed to set” and “before [not during] use in water to suppress noise in a marine seismic survey.” The applicants also remind the examiner that the recent decision in *Phillips vs. AWH Corp.* (415 F.3d 1303 (Fed. Cir. 2005)) stands for the proposition that the words of patent claims cannot be interpreted in a manner divorced from the context of the entire patent. The applicants respectfully believe that that is what the examiner is doing by construing the applicants’ claims to read on the activities described by Zahradnik.

CONCLUSION

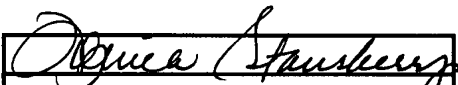
The applicants respectfully request an advisory action to the effect that in view of the preceding arguments, all pending, not withdrawn claims are allowable.

Respectfully submitted,

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